

## INTEROFFICE MEMORANDUM

Date:

January 27, 2004

To:

B. T. Richards

MS 3921

6-5060

From:

J. R. Arrowood

MS 5209

6-4497

Subject:

DOSE ESTIMATES FOR INTEC-603 BASIN ACTIVITIES

Please keep in mind that these dose estimates provide at best only generalized information. To calculate a more accurate estimate additional detailed descriptions of each separate task with specific work locations, equipment used and processes employed will need to be established. Dose estimates were derived from the manhours provided multiplied by the exposure rate expected to be encountered. The exposure rate was derived from previous routine surveys and knowledge of dose received during previous work within this area.

## **OPTION 1**

	Manho	ours	Assumptions	Exposure Rate	Dose Estimate
Sludge Removal	5370	Worke	s will be filled with water. ers will be within the basin ment will have shielding.		26.8 rem
Basin Containment	4561	filled	inment will be constructed basins. Workers will be a basin areas.	d over. 5mR/hr	22.8 rem
Basin Decontamination	3688	in the	work will be done with w basin, However, workers se proximity of basin surfa	will be	36.8 rem
Water Removal	500	basin a	work will be done outside area. Work will be around ninated components.		500 mrem

Total 86.9 rem

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## **OPTION 2**

Sludge Removal	5370	Basins will be filled with water. Workers will be within the basin areas. Equipment will have shielding.	5 mR/hr	26.8 rem
Grouting	1584	Work will take place in basin areas.	5 mR/hr	12.5 rem
				Total 39.3 rem
OPTION 3				
Grouting	1584	Work will take place in basin areas.	5 mR/hr	12.5 rem
			,	Total 12.5 rem
OPTION 4				
Water Removal	500	Most work will be done outside of basin areas. Work will be around		
		contaminated componets.	1mR/hr	500 mrem
Grouting	1584	Work will take place in basin areas	5 mR/hr	12.5 rem
				Total 13 rem

If there are any questions, please call me at 6-4497.

## cc: J. R. Arrowood Letter File

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